

We claim:

1. An interior rearview mirror assembly for a vehicle, said mirror assembly comprising:

a casing;

a reflective element positioned in said casing; and

5 said casing including a storage space, said storage space providing storage capacity for at least one accessory and for storing the accessory in a location accessible by an occupant of the vehicle whereby the accessory can be inserted into or removed from said storage space for use by an occupant of the vehicle.

2. The interior rearview mirror assembly according to Claim 1, wherein said reflective element comprises a variable reflectance reflective element.

3. The interior rearview mirror assembly according to Claim 2, wherein said reflective element comprises an electro-optic reflective element.

4. The interior rearview mirror assembly of Claim 3, wherein said electro-optic reflective element comprises an electrochromic reflective element.

5. The interior rearview mirror assembly of Claim 4, wherein said electrochromic reflective element comprises an electrochemichromic reflective element.

6. The interior rearview mirror assembly according to Claim 1, wherein said storage space is defined by a recessed portion provided on said casing.

7. The interior rearview mirror assembly according to Claim 6, said casing including an upper wall, and said recessed portion being provided in said upper wall.

8. The interior rearview mirror assembly according to Claim 7, wherein said recessed portion comprises an elongated recess for supporting at least one of a pair of glasses, a writing instrument, and money.

9. The interior rearview mirror assembly according to Claim 6, wherein said recessed portion extends into said casing behind said reflective element.
10. The interior rearview mirror assembly according to Claim 9, wherein said recessed portion is defined by an elongated body.
11. The interior rearview mirror assembly according to Claim 10, wherein said body includes reinforcing ribs, said reinforcing ribs stiffening said insert and further defining segregated storage sub-spaces within said storage space.
12. The interior rearview mirror assembly according to Claim 1, further comprising a pendent accessory, said casing including a bottom wall, said recessed portion extending into said bottom wall and forming a cavity, said pendent accessory being stored in said cavity.
13. The interior rearview mirror assembly according to Claim 12, wherein said pendent accessory includes a reflective element.
14. The interior rearview mirror assembly according to Claim 13, wherein said pendent accessory further includes a housing, said housing supporting said reflective element.
15. The interior rearview mirror assembly according to Claim 14, wherein said housing is supported from said mirror assembly by a support, said housing being pivotally mounted to said support to permit repositioning of said reflective element for viewing by an occupant of the vehicle.
16. The interior rearview mirror assembly according to Claim 12, wherein said pendent accessory includes a display element, said display element displaying information for an occupant of the vehicle.

17. The interior rearview mirror assembly according to Claim 16, wherein said pendent accessory further includes a housing, said housing supporting said display element.

18. The interior rearview mirror assembly according to Claim 17, wherein said housing is supported from said mirror assembly by a support, said housing being pivotally mounted to said support to permit repositioning of said display element about said support for viewing by an occupant of the vehicle.

19. The interior rearview mirror assembly according to Claim 17, wherein said pendent accessory further includes a circuit board supported in said housing, said circuit board supporting electronics for displaying information on said display element.

20. The interior rearview mirror assembly according to Claim 12, wherein said pendent accessory is adapted for extension and retraction into said cavity.

21. The interior rearview mirror assembly according to Claim 20, wherein said pendent accessory includes a housing, said housing being mounted for movement between an extended position from said casing and a retracted position into said casing, said housing is substantially housed within said cavity when said housing is moved to its retracted position
5 within said casing.

22. The interior rearview mirror assembly according to Claim 21, wherein said housing has an outer surface generally following contours of said casing when said pendent accessory is moved to its retracted position within said casing.

23. The interior rearview mirror assembly according to Claim 12, wherein said housing is formed from a material at least similar to material forming said casing.

24. The interior rearview mirror assembly according to Claim 1, wherein said casing comprises a plastic casing.

25. The interior rearview mirror assembly according to Claim 1, wherein said casing comprises an engineering polymer material.
26. The interior rearview mirror assembly according to Claim 1, wherein said storage space on said casing includes an accessory attachment member for releasably holding the accessory.
27. The interior rearview mirror assembly according to Claim 26, wherein said attachment member includes resilient arms for releasably holding a work piece.
28. The interior rearview mirror assembly according to Claim 26, wherein said attachment member comprises a first attachment member, said casing including a second attachment member for releasably holding a work piece.
29. The interior rearview mirror assembly according to Claim 26, wherein said first attachment member comprises a spring clip.
30. The interior rearview mirror assembly according to Claim 26, wherein said attachment member is integrally molded with said casing.
31. The interior rearview mirror assembly according to Claim 26, wherein said casing includes a bottom wall, said attachment member being provided at said bottom wall below said reflective element.
32. The interior rearview mirror assembly according to Claim 26, wherein said casing includes a rearward facing opening and a forward facing side, said reflective element being supported in said rearward facing opening, and said attachment member being provided on said forward facing side.
33. The interior rearview mirror assembly according to Claim 1, wherein said casing includes at least one recessed portion formed therein defining said storage space for storing the accessory.

34. The interior rearview mirror assembly according to Claim 1, further comprising a dockable assembly.

35. The interior rearview mirror assembly according to Claim 34, wherein said dockable assembly is supported in said storage space and is removably mounted to said casing whereby said dockable assembly can be docked in said storage space and an occupant of the vehicle can remove said dockable assembly from said storage space and use said
5 dockable assembly independently of said rearview mirror assembly.

36. The interior rearview mirror assembly according to Claim 34, wherein said dockable assembly comprises a light assembly.

37. The interior rearview mirror assembly according to Claim 35, wherein said light assembly includes a housing and a lens, at least one of said lens and said housing being contoured to follow contours of said casing whereby said light assembly forms a unitary part of said casing of said mirror assembly when said light assembly is mounted in said recessed
5 portion.

38. The interior rearview mirror assembly according to Claim 37, wherein said housing and said lens are contoured to follow said contours of said casing.

39. The interior rearview mirror assembly according to Claim 37, wherein said casing includes a pair of recessed portions formed on opposed ends of said casing, each of said recessed portion storing a light assembly.

40. The interior rearview mirror assembly according to Claim 37, wherein said housing includes at least one gripping surface.

41. The interior rearview mirror assembly according to Claim 40, wherein said gripping surface comprises a recess formed in said housing.

42. The interior rearview mirror assembly according to Claim 34, wherein said casing includes a forward facing side, and said forward facing side includes said recessed portion.

43. The interior rearview mirror assembly according to Claim 33, wherein said recessed portion includes an accessory attachment member for securing the accessory to said casing.

44. The interior rearview mirror assembly according to Claim 1, wherein said casing includes an upper wall, a lower wall and opposed end walls, said casing including a recess extending into one of said end walls and thereby defining said storage space.

45. The interior rearview mirror assembly according to Claim 44, said recess further extending between said upper and lower walls to define a slotted recess.

46. The interior rearview mirror assembly according to Claim 44, further comprising an accessory holder, said holder being slidably positioned in and releasably held in said recess, and said holder for holding the accessory thereon.

47. The interior rearview mirror assembly according to Claim 46, wherein said holder includes a body, said body having upper and lower walls, an end wall and a back wall, said end wall inserting into said recess when said holder is positioned in said recess, and at least one of said upper wall, said lower wall and an edge of said back wall being aligned to
5 follow contours of said casing when said holder is positioned in said recess.

48. The interior rearview mirror assembly according to Claim 47, wherein said recess includes an end wall spaced inwardly of said casing end wall, said end wall of said holder abutting said end wall of said recess when said holder is positioned in said recess.

49. The interior rearview mirror assembly according to Claim 47, wherein each of said upper wall, said lower wall, and said edge of said holder at least generally follow said contours of said casing when said holder is positioned in said recess.

50. The interior rearview mirror assembly according to Claim 46, wherein said recess is defined between opposed walls, one of said walls of said recess including at least one friction enhancing member, said friction enhancing member frictionally engaging said holder when said holder is inserted into said recess.

51. The interior rearview mirror assembly according to Claim 50, wherein said friction enhancing member comprises a resilient member.

52. The interior rearview mirror assembly according to Claim 51, wherein said resilient member comprises a resilient rib.

53. The interior rearview mirror assembly according to Claim 46, wherein said holder includes at least one gripping surface, said gripping surface permitting a driver of the vehicle to grasp said holder so that said holder can be removed from said recess and reinserted into said recess after removal with minimal distraction to the driver.

54. An interior rearview mirror assembly for a vehicle, said mirror assembly comprising:

a reflective element;

a casing, said reflective element being located in said casing; and

5 said casing including a casing wall, said casing wall having a recess formed therein, said recess defining a storage space for storing one or more accessories wherein the accessory is accessible and insertable and removable from said casing by an occupant of the vehicle for use thereof independent of the mirror assembly.

55. The interior rearview mirror assembly according to Claim 54, wherein said recess includes a planar mounting surface for supporting the accessory.

56. The interior rearview mirror assembly according to Claim 55, wherein said recess includes a coupler for mounting the accessory to said planar surface of said casing.

57. The interior rearview mirror assembly according to Claim 54, wherein said casing wall includes a forward facing side, and said recess being provided in said forward facing side.
58. The interior rearview mirror assembly according to Claim 54, wherein said casing wall includes a rearward facing side, said recess provided in said rearward facing side.
59. The interior rearview mirror assembly according to Claim 54, wherein said recess includes a second recess defining a second storage space for supporting other accessories.
60. The interior rearview mirror assembly according to Claim 59, wherein said second storage space comprises an accessory attachment member for releasably holding an accessory.
61. The interior rearview mirror assembly according to Claim 60, wherein said accessory attachment member is adapted for holding a work piece.
62. The interior rearview mirror assembly according to Claim 54, wherein casing wall includes an end wall, said recess extending into said end wall and defining a cavity therein, said cavity supporting an accessory holder therein.
63. The interior rearview mirror assembly according to Claim 54, wherein casing wall includes a bottom wall, said recess extending into said bottom wall and defining a cavity therein, a pendent accessory being stored in said cavity and being positionable between an extended position within said cavity and extended position for viewing by an occupant of the vehicle.
64. The interior rearview mirror assembly according to Claim 54, further comprising a light module supported in said casing for illuminating a portion of the vehicle interior.

65. The interior rearview mirror assembly according to Claim 54, said casing including a bottom wall, an accessory attachment member being provided at said bottom wall.
66. The interior rearview mirror assembly according to Claim 54, said casing including a top wall, an accessory attachment member being provided at said top wall.
67. The interior rearview mirror assembly according to Claim 54, said recess extending into said cavity for supporting coins therein, said recess including a dispensing opening for dispensing one or more coins therefrom.
68. The interior rearview mirror assembly according to Claim 67, said casing including a plurality of recesses, each respective recess including a latch for releasing one or more coins from said dispensing opening of said respective recess.
69. The interior rearview mirror assembly according to Claim 68, said latches being actuatable from a forward facing side of said casing.
70. The interior rearview mirror assembly according to Claim 67, said casing defining a second storage space in said cavity for holding an air freshener dispenser, and said casing wall including an opening for dispensing the air freshener therethrough.
71. The interior rearview mirror assembly according to Claim 54, wherein said reflective element comprises a variable reflectance reflective element.
72. The interior rearview mirror assembly according to Claim 54, further comprising an insert, said insert providing said storage space.
73. The interior rearview mirror assembly according to Claim 72, wherein said insert comprises a bin, said casing wall including an opening and said bin being inserted into said casing in said opening.

74. The interior rearview mirror assembly according to Claim 73, wherein said bin is removably mounted to said casing in said opening.

75. The interior rearview mirror assembly according to Claim 54, wherein said recess is formed by molding said recess into said casing wall.

76. An interior rearview mirror assembly for vehicles, said mirror assembly comprising:

a reflective element;

a casing, said reflective element located in said housing; and

5 a support for mounting said casing to a windshield, said support including a mounting bracket, one of said casing and said mounting bracket including a storage space for supporting at least one accessory thereby.

77. The interior rearview mirror assembly according to Claim 76, wherein said reflective element comprises a variable reflectance reflective element.

78. The interior rearview mirror assembly according to Claim 77, wherein said reflective element comprises an electro-optic reflective element.

79. The interior rearview mirror assembly according to Claim 77, wherein said bracket includes a planar mounting surface for supporting the accessory thereon.

80. The interior rearview mirror assembly according to Claim 77, wherein said bracket includes a planar body having said planar mounting surface.

81. The interior rearview mirror assembly according to Claim 77, wherein said bracket includes a planar body mounted thereto, said planar body having said planar mounting surface.

82. The interior rearview mirror assembly according to Claim 79, wherein said bracket further includes an accessory attachment member for holding a work piece.

83. The interior rearview mirror assembly according to Claim 82, wherein said accessory attachment member includes a C-shaped cross-section for holding a cylindrical work piece.

84. The interior rearview mirror assembly according to Claim 82, wherein said bracket includes a bottom edge, said attachment member being positioned at said bottom edge.

85. The interior rearview mirror assembly according to Claim 82, wherein said attachment member comprises a clip.

86. The interior rearview mirror assembly according to Claim 76, wherein said mounting bracket comprises a break-away mounting break.

87. An interior rearview mirror assembly for a vehicle, said mirror assembly comprising:

a reflective element;

a casing having a casing wall, said reflective element being located in said

5 casing, said casing wall defining a rearward facing opening and a cavity therein; and

said casing including a storage space in said cavity, said storage space for providing storage for at least one accessory and for storing the accessory in a location easily accessible by an occupant of the vehicle whereby the accessory can be inserted in or removed from said storage space for use by an occupant of the vehicle independent of said mirror
10 assembly.

88. The interior rearview mirror assembly according to Claim 87, wherein said reflective element is supported in said casing by a retaining rim.

89. The interior rearview mirror assembly according to Claim 87, wherein said storage space is defined by a bin.

90. The interior rearview mirror assembly according to Claim 89, wherein said bin comprises a trough-shaped bin.

91. The interior rearview mirror assembly according to Claim 89, wherein said bin comprises a plastic bin.

92. The interior rearview mirror assembly according to Claim 88, wherein said reflective element is supported on said retaining rim, said retaining rim being pivotally mounted to said casing wall at said forward facing opening whereby said retaining rim is movable between a closed position wherein said reflective element is in a rearward viewing position and an open position wherein said cavity and said storage space is accessible through said rearward facing opening.

93. The interior rearview mirror assembly according to Claim 92, further comprising a bin, said bin being supported on said retaining rim and providing said storage space.

94. The interior rearview mirror assembly according to Claim 93, wherein said bin comprises a trough shaped bin for supporting at least one accessory selected from the group consisting of a pair of glasses, a writing instrument, and money.

95. The interior rearview mirror assembly according to Claim 93, wherein said bin includes ribs, said ribs defining segregated storage sub-spaces within said storage space.

96. The interior rearview mirror assembly according to Claim 92, wherein said bezel includes a latch for releasably locking said bezel in said closed position.

97. The interior rearview mirror assembly according to Claim 87, wherein said reflective element comprises an electro-optic reflective element.

98. The interior rearview mirror assembly of Claim 97, wherein said electro-optic reflective element comprises an electrochromic reflective element.

99. The interior rearview mirror assembly of Claim 98, wherein said electrochromic reflective element comprises an electrochemichromic reflective element.

100. The interior rearview mirror assembly according to Claim 87, wherein said casing comprises a fiber reinforced nylon plastic casing.

101. The interior rearview mirror according to Claim 87, wherein said casing comprises an engineering polymer material.

102. An interior rearview mirror assembly for a vehicle, said mirror assembly comprising:

a casing;

a reflective element positioned in said casing; and

5 said casing including a storage space, said storage space providing storage capacity for at least one accessory and for storing the accessory in a location accessible by an occupant of the vehicle, whereby the accessory can be stored in said storage space or moved from said storage space for use by an occupant of the vehicle.

103. The interior rearview mirror assembly according to Claim 102, wherein said storage space comprises an accessory attachment member.

104. The interior rearview mirror assembly according to Claim 103, wherein said accessory attachment member includes at least one resilient arm for holding the accessory on said casing.

105. The interior rearview mirror assembly according to Claim 103, wherein said accessory attachment member comprises a pair of resilient arms, said resilient arms for gripping at least a portion of the accessory therebetween.

106. The interior rearview mirror assembly according to Claim 105, wherein said resilient arms have a C-shaped cross section.

107. The interior rearview mirror assembly according to Claim 105, wherein said casing includes a casing wall, said accessory attachment member being integrally molded with said casing wall.

108. The interior rearview mirror assembly according to Claim 105, wherein said casing including a bottom wall, said accessory attachment member being providing at said bottom wall.

109. The interior rearview mirror assembly according to Claim 105, wherein said casing wall includes a forward facing side, said accessory attachment member being provided at said forward facing side.